

no salinity, moderate to well drained, tillage not affected by stoniness. Grassland vegetation. Population scattered along banks of roadside ditch and undisturbed area by fence row. Additional seed collected 0.5 km away. Uniform population, effective population size - several hundred plants. Typical *H. pauciflorus* but with smaller heads, collected multiple heads per plant due to small population size. Well past peak flowering, seed set questionable. No apparent insect or disease damage but plants very mature.

PI 592353. *Helianthus pauciflorus* Nutt.

Wild. PAU-2336; Ames 22220. Collected 09/14/1994 in Manitoba, Canada. Latitude 49 deg. 26' 36'' N. Longitude 99 deg. 37' 49'' W. Elevation 457 m. 5.1 km north of Ninette, Hwy 18 N. Brown, sandy soil, open depression of roadside ditch, topography - plain (level), poor to moderate soil nutrient content, low salinity, well drained, tillage not affected by stoniness. Cropland vegetation. Population located on back-slope of two cut banks in roadside ditch. Two populations collected, separated by 0.3 km. Uniform population, effective population size - several hundred plants. Past peak flowering, seed set questionable. Severe rust on several plants, several heads clipped off.

The following were collected by Gerald Seiler, USDA, ARS, Northern Crop Science Lab., P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States. Received 09/16/1994.

PI 592354. *Helianthus petiolaris* ssp. *petiolaris*

Wild. PET-2292; Ames 22221. Collected 09/05/1994 in Saskatchewan, Canada. Latitude 52 deg. 7' 43'' N. Longitude 106 deg. 57' 45'' W. Elevation 444 m. 14.5 km east of Asquith, Hwy. 14 E. Black-brown, sandy soil, level area and upper slope of roadside ditch, topography - plain (level), poor to moderate soil nutrient content, no salinity, moderate to well drained, tillage affected by stoniness. Grassland (hay meadow) veg. Scattered population along both sides of road, in roadside ditch and along railroad tracks. Uniform population, effective population size - approximately 300 plants, population area 200 meters square. Plants typical of North Dakota *H. petiolaris*, shorter plants near edge of road. Past peak flowering, seed set good. No insect damage but some rust. Associated species: *Sonchus*, *Crepis*.

PI 592355. *Helianthus petiolaris* ssp. *petiolaris*

Wild. PET-2293; Ames 22222. Collected 09/05/1994 in Saskatchewan, Canada. Latitude 52 deg. 3' 23'' N. Longitude 107 deg. 33' 46'' W. Elevation 487 m. 0.8 km west of Perdue, Hwy. 14 W. Brown, sandy soil, level area and upper slope of roadside ditch, topography - plain (level), poor to moderate soil nutrient content, no salinity, moderate to well drained, tillage affected by stoniness. Grassland vegetation (near meadow). Scattered population along edge of road in roadside ditch. Uniform population, effective population size - approximately 75 plants, population area 100 meters square. Plants typical of *H. petiolaris* ssp. *petiolaris*, shorter plants along edge of road. Good seed set. No insect damage, some rust. Associated wild species: *Sonchus*, *Crepis*.

The following were collected by Mary Brothers, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011, United States; Gerald Seiler, USDA, ARS, Northern Crop Science Lab., P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States. Donated by Gerald Seiler, USDA, ARS, Northern Crop Science Lab., P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States. Received 09/16/1994.

PI 592356. *Helianthus petiolaris* ssp. *petiolaris*

Wild. Ames 22223; PET-2300. Collected 09/09/1994 in Saskatchewan, Canada